



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/848,456

05/03/2001

Michael W. Barry

TRSY-23,859

7206

25883

7590

05/13/2004

HOWISON & ARNOTT, L.L.P

P.O. BOX 741715

DALLAS, TX 75374-1715

EXAMINER

WALLERSON, MARK E

ART UNIT

PAPER NUMBER

2626

DATE MAILED: 05/13/2004

16

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/848,456

Applicant(s)

BARRY ET AL.

Examiner

Mark E. Wallerson

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 02 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 32-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 32-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Part III DETAILED ACTION

Notice to Applicant(s)

1. This action is responsive to the following communications: amendment filed on **3/2/2004**.
2. This application has been reconsidered. Claims 32-39 are pending.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
4. Claims 32-39 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.
 - a. There is no disclosure in the original specification of "an associated printing location". **This rejection was made in the Office Action mailed on 12/2/2003, and has not been addressed by Applicant.**
 - b. There is no disclosure in the original specification of "**substantially** all the pixels" as claimed in lines 8 and 9 of claim 32. **This rejection was also made in the Office Action mailed on 12/2/2003, and is addressed below.**
 - c. There is no disclosure in the original specification of "an accumulator".

Art Unit: 2626

d. There is no disclosure in the original specification of decrementing the current toner level value in the toner level register by the accumulated image value for the print engine at the associated printing location and maintaining this value if a comparison of the accumulated image value with the current toner level value for the print engine at the associated printing location indicates that the current toner level minus the accumulated image value in the first register is greater than a minimum toner level value associated with the print engine at the associated printer location.

e. There is no disclosure in the original specification of sending the rasterized image to the print engine at the associated printing location for rendering only if the decremented toner level value associated therewith has been determined to greater than the minimum toner level.

Yet again, if Applicant believes these rejections to be in error, Applicant is requested to provide SPECIFIC REFERENCED PAGE AND LINE(S) support for this claimed subject matter in the original specification.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 32 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase “determined to greater than the minimum toner level” in line 17 of claim 32 is unclear.

Art Unit: 2626

7. Claim 32 recites the limitation "the first register" in line 13 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sakuma (U. S. 5,663,750) in view of Fukui et al (Fukui) (U. S. 5,124,751).

With respect to claim 32, Sakuma discloses a method for determining the amount of toner required to render a print job without prior knowledge of the toner level of a toner cartridge (column 2, lines 16-29); accumulating in a first register (22) toner values of all the pixels in a rasterized image prior to sending the job to the printer (column 4, lines 39-59); decrementing the register of the print engine at the printing location (which reads on updating the remaining ink value stored in the non-volatile memory) (column 8, lines 53-58) if a comparison of the accumulated value with the toner level indicates that the accumulated value is less than or equal to the toner level of the print engine (which reads on updating the remaining ink value stored in non-volatile memory 21 when more than a little ink remains) (column 5, line 59 to column 6, line 3), and sending the print job to the printing location for rendering (column 5, lines 59-61).

Sakuma differs from claim 32 in that he does not clearly disclose that the toner values are expressed as an incremental value ranging from zero to a maximum value. Fukui discloses an image forming apparatus wherein pixels of an image are classified in gradient levels ranging from 0 to 255 (column 5, lines 19-42). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Sakuma wherein the toner values are expressed as an incremental value ranging from zero to a maximum value. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Sakuma by the teaching of Fukui in order to determine the amount of toner to be supplied as disclosed by Fukui in column 2, lines 38-48.

Response to Arguments

10. Applicant's arguments filed 3/2/2004 have been fully considered but they are not persuasive.

I. 35 U.S.C. § 112 1st Paragraph Rejection

In the Office Action mailed on 12/2/2003, the Examiner rejected claim 32 under 35 U.S.C. § 112 1st Paragraph on the ground that there is no disclosure in the original specification for “**substantially** all the pixels” as claimed in lines 7 and 8 of claim 32 as currently amended. Applicant provided alleged support for this subject matter on page 62, lines 17-19. This cited area discloses that “[E]ach pixel will have a value that ranges from zero to 255 and these are summed up for the **entire** page” (emphasis added). The Examiner maintains that the values in each pixel in an entire is not the same as “substantially” all the pixels in that page. Accordingly,

there is no disclosure in the original specification for “**substantially** all the pixels” as claimed in lines 7 and 8 of claim 32 as currently amended. **That rejection is therefore made FINAL.**

II. 35 U.S.C. § 103(a) Rejection

Applicant submits that “the deficiency in *Sakuma* is that *Sakuma* does not “inhibit” transfer of the print job to a print engine”. It is unclear to the Examiner what element(s) of claim 32 this argument is intended to address. Applicant is arguing subject matter not being claimed.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 2626

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark E. Wallerson whose telephone number is (703) 305-8581. The examiner can normally be reached on Monday-Friday - 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached on (703) 305-4863. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)

Mark E. Wallerson
Primary Examiner
Art Unit 2626

